

$$\begin{aligned} & \bullet \quad \bullet \quad \quad \quad , \quad \bullet \quad \bullet \quad \quad , \ll \quad \quad \quad \gg \\ & \bullet \quad \bullet \quad \quad \quad , \quad \bullet \quad \bullet \quad \quad , \bullet \quad \bullet \quad \quad , \ll \quad \quad \quad \gg \end{aligned}$$

The ways of intensification of limiting stage of process are defined basing on approaches for turbulent flow. The problem was solving for condenser of distillation units. The optimal design of vertical tube condenser with thin-layer film phase flow. The developed unit provides two kinds of enhanced phase flow thin-layer and film that lets to do free removing of gas separated flow liquid inside tubes. In this case the efficiency of heat transfer surface is increased.

